

971

UNITED STATES DEPARTMENT OF AGRICULTURE

Agricultural Research Service

STEROIDAL SAPOGENINS XXVI

Supplementary Table of Data for Steroidal Sapogenins XXV

CORRECTIONS ON PRESENT LIST

Page 1, "Code for sapogenins", delete "y - yucca" and add "ya - yamo".

<u>Page</u>	<u>Acces. No.</u>		<u>Page</u>	<u>Acces. No.</u>	
2	2713	A. aurea	13	2238, 2239	
4	2101,2102,2205 2206,2207	A. pacifica	14	2240,2241	D. bulbifera
	2201	A. tequilana		2463,2464,2551,	
5	2869-0	Change "0.9%" to "0.3 g./gal."		2552,2639	D. floribunda
	2209	Change "d100" to "ni"		2638	Change "3.5" to "2.5"
	2509	Change "1.5, h100" to "1.3,h40; m,g60"		2871	D. galeottiana
6	2104	A. yaquiiana		2885	D. cf. floribunda
	2152	A. tequilana	15	2885	Change "y" to "ya"
	2202	A. pacifica		2917	D. bulbifera
	2321	A. abrupta		2928	D. densiflora
	2322,2325	A. cochlearis		2930, 2999	D. galeottiana
	2326,2329,2331	A. crassispina		2932	D. spiculiflora
	2336	A. aff. scabra	20	2932, 2997	Change "y" to "ya"
	2390	Matape	21	2332	Hesperaloe funifera
7	2882	A. xalapensis		2512	Y. arizonica
	2931	A. deweyana	23	2620	Bloomeria crocea
8	2941	Rauvolfia		2083	var. luxurians
10	2535	Transfer to Palmae	24	2645	Dictyosperma
	2218	Atkinsia cubensis;		2131	amaricaulis
		transfer to Malvaceae	26	2315	lindeniana
11	2094A,B	Transfer to Taxaceae		2195	Styloma
12	2034	Transfer to	27	2831	Leucadendron
		Bignoniaceae		2178	lalandei
	2251	batatas		2272	infausta
13	2879,2880,2929	Change "y" to "ya"	29	2267	madagascariensis
				2450	phantasmagorica
				2054	Clerodendrum

CORRECTIONS ON SECOND 1000 ACCESSIONS (AIC-367)

<u>Page</u>	<u>Acces. No.</u>	
3	1756	polyscantha
31	1358	Cephalotaxus sp.

STEROIDAL SAPOGENINS XXVI

SUPPLEMENTARY TABLE OF DATA FOR STEROIDAL SAPOGENINS XXV

Monroe E. Wall, C. S. Fenske, and J. J. Willaman
*Eastern Regional Research Laboratory**
Philadelphia 18, Pennsylvania

and

D. S. Correll, B. G. Schubert, and H. S. Gentry
Horticultural Crops Research Branch
Agricultural Research Service
United States Department of Agriculture
Beltsville, Maryland

The results of this extensive survey of plant materials for steroidal sapogenins and other constituents have been published in units of 1000 plant accessions. The main text and conclusions appeared in journal articles, while the tabular data appeared as processed supplements. Thus the first 1000 was covered in No. VII (*J. Amer. Pharm. Assoc., Sci. Ed.* 43, 1-7 (1954)), and its supplement in No. XIII (AIC-363. U. S. Dept. of Agriculture, Philadelphia 18, Pa.). The second 1000 was in No. XII (*J. Amer. Pharm. Assoc. Sci. Ed.* 43, 503-5 (1954)) and its supplement in No. XV (AIC-367. U. S. Dept. of Agriculture, Philadelphia 18, Pa.). The third 1000 was in No. XXV (*J. Amer. Pharm. Assoc. Sci. Ed.* 44, 438-440 (1955)), and its supplement is No. XXVI, the present publication.

Since in our previous operations the non-steroid groups of constituents were practically never found in species of Agave, Dioscorea and Yucca, tests for these were not made beyond about serial number 2400, and the spaces are blank.

* LABORATORY OF THE EASTERN UTILIZATION RESEARCH BRANCH, AGRICULTURAL RESEARCH SERVICE, U. S. DEPARTMENT OF AGRICULTURE.

TABLE I. CONT. - PAGE 2

A M A R Y L L I D A C E A E

2710	Agave aurea	Todos Santos, B.C., Mex.	5/52	1	-	1.6	t15:h,dh45;m,dm40				
2715	"	"	5/52	fr	+	0.34	h87;m13				
2761	"	Comondu, B. C., Mex.	6/52	1	+	0					
2762	"	"	6/52	fr	+						
2763	"	3 mi. N. Comondu, B. C., Mex.	6/52	fr	+	0.5	t65;h5;g30				
2772	"	Calmalli, B. C., Mex.	6/52	1	+	0.3	t60;h15;m,g25				
2773	"	"	6/52	f	-						
2333	bracteosa	Canyon Huasteca, N. L., Mex.	2/52	1	+	0					
2711	brandegeei	Cabo San Lucas, B.C., Mex.	5/52	fr	+	0.3	t50;h,dh20;dm30		0	0	0
2712	"	"	5/52	1	+	0.55	t80;h20				
2713	"	10 mi. W. San Jose del Cabo, B. C., Mex.	5/52	1	+	0.4	h100				
2719	"	Cabo San Lucas, B. C., Mex.	5/52	1	+	1.0	t100				
2351	brevispina	C. G. F. # mi. N. of Laguna, Seca Chapala, B.C., Mex.	2/52	1, f1	+	0.7	h100				
2065	cerulata	El Marmol, B. C., Mex.	11/51	fr	+	0.8	h,dh69;g31		0	0	0
2752	"	Sierra San Luis, B. C., Mex.	6/52	1	+	0.95	h70;m20;t10				
2753	"	"	6/52	1	+	0.6	h80;t20				
2754	"	B. C., Mex.	6/52	1	+	0.72	h60;m20;dm20				
2755	"	"	6/52	1	+	0.9	t93;h7				
2764	"	B. C., Mex.	6/52	1	+	0.7	h75;m25				
2768	"	Isla San Marcos, B. C., Mex.	6/52	1	+	0.3	t25;h45;m,g30				
2769	"	San Ignacio, B. C., Mex.	6/52	1	+	1.2	g,m68;h25;t7				
2770	"	Calmalli, B. C., Mex.	6/52	1	+	1.1	h,dh65;m,dm35				
2771	"	"	6/52	1	+	0.6	h,dh40;m,dm60				
2779	"	Laguna Seca Chapala, B. C., Mex.	6/52	1	-						
2781	"	21 mi. E. Punta Prieta, B. C., Mex.	6/52	1	+	0.4	h,dh30;m,dm70				
2782	"	5 mi. N.W. Lag. Seca Chapala, B. C., Mex.	6/52	1	+	0.1	h100				
2786	"	Chapala, B. C., Mex.	6/52	f1	-						
2787	"	Sierra San Luis, B. C., Mex.	5/52	1	+	0.6	t10;h20;m,dm70				
2788	"	Calmalli, B. C., Mex.	5/52	1	+	0.6	h45;m,dm55				
2789	"	"	5/52	1	+	0.8	t20;h55;m,dm25				
2790	"	5 mi. N.W. Lag. Seca Chapala, B. C., Mex.	5/52	1	+	1.2	h,dh35;m,dm65		0	0	0
2047	chrysantha	Superior, Ariz.	12/51	1	+	0.1	h100				
2510	"	"	3/52	1	+	0.3	h90;dh,m				+

TABLE I. CONT. - PAGE 3

<u>Collection</u>		<u>Sapogenins</u>									
Accession No.	Species	Source	Date collected	Plant part	Hemolysis test	Total m.f.b., %	Identified, % of Total	Flavonols	Alkaloids	Tannins	Sterols
2106	Agave chrysglossa	Nolasco Island, Gulf of Calif.	1/52	l	+	1.6	sm100	0	0	0	0
2154	" colorata	Bacachaca, Son., Mex.	1/52	l	+	0.1	c90;t tr	0	0	0	+
2516	" "	Sierra Bohiuacame, Son., Mex.	4/52	l, butts	-	0		0	0	0	++
2062A	" decipiens	C. G. F.	12/51	l	+	0		0	0	0	+
2062B	" "	" "	12/51	fl	+	0		0	0	0	+
2547	" deserti	Pinyon Flats, Cal.	4/52	l	+	0.75	t66;h20;g14	0	0	0	+
2548	" "	" "	4/52	l	+	0		0	0	0	+
2017	" expansa	Fallbrook, Calif.	11/51	l	+	0		0	0	0	+
2018	" "	" "	11/51	l	+	0.1	h60;dh,t	0	0	0	+
2019	" "	" "	11/51	fr	+	0		0	0	0	+
2020	" "	" "	11/51	l	+	0		0	0	0	+
2395	" "	Monte Carlo, Son., Mex.	2/52	l	-	0		0	0	0	+
2546	" "	Fallbrook, Calif.	4/52	l	+	0		0	0	0	+
2330	" falcata	50 mi. N.E. of San Luis Potosi, S.L.P. Mex.	2/52	l	-	0.22	h65;t28;c	0	0	0	+
2100	" fourcroydes	cd. Obregon, Son., Mex.	1/52	l	+	0		0	0	0	+
2105	" "	" "	1/52	fl	+	0		0	0	0	+
2179A*	" "	Nat. Instit. Health (Mex.)	1/52	juice	+	0		0	0	0	+
2179B*	" "	" "	1/52	sludge	+	0		0	0	0	+
2210	" "	Pericos, Sin., Mex.	1/52	l (old)	+	0.02	t,h	0	0	0	+
2211	" "	" "	1/52	l (young)	+	0.1	t100	0	0	0	+
2212*	" "	" "	1/52	fiber waste	+	0		0	0	0	0
2370*	" "	" "	2/52	l (pulp)	+	0.4	h100	0	0	0	0
2805A	" "	Tampico, Mex. (Mex. Fibre Co.)	6/52	l	+	0.18	t60;h40	0	0	0	0
2805B*	" "	Fibre Co.)	6/52	juice	+	4g./l.	t70;h30	0	0	0	0
2596	" goldmaniana	Rosario, B. C., Mex.	4/52	fr	+	0.2	t97;h,m	0	0	0	0
2607	" "	Socorro, B. C., Mex.	4/52	l	+	0		0	0	0	0
2613	" "	" "	4/52	fr	+	0		0	0	0	0
2614	" "	Rosario, B. C., Mex.	4/52	l	+	0.15	h60;dh40	0	0	0	0
2617	" "	" "	4/52	l	+	0.25	t10;h, dh55;m, dm35	0	0	0	0
2774	" "	10 mi. S.W. Marmolito, B.C. Mex.	6/52	fr	+	0.2	t40;g60	0	0	0	0
2780	" "	Punta Prieta, B.C., Mex.	6/52	l	+	0.6	h80;t20	0	0	0	0
2783	" "	Rancho Mesquital, B.C., Mex.	6/52	l	+	0		0	0	0	0

TABLE I. CONT. - PAGE 5

Accession No.	Species	Source	Date collected	Plant part	Hemolysis test	Sapogenins		Flavonols	Alkaloids	Tannins	Sterols
						Total m.f.b., %	Identified % of Total				
A M A R Y L L I D A C E A E											
2717	Agave roseana	8 mi. N. Punta Frailes, B.C., Mex. Saltillo, Coa., Mex.	5/52	1	+	1.1	t70;h20;g10	0	0	0	+
2310	" scabra	Saltillo, Coa., Mex.	2/52	1	-			0	0	0	+
2327	" schidigera	14 mi. S.W. San Luis Potosi, S.L.P., Mex.	2/52	1	+	1.0	g100	0	0	0	0
2153	" schottii	Bachaca, Son., Mex.	1/52	1	+	1.2	c100	0	0	0	0
2099	" "	Bahia San Carlos, Son., Mex.	1/52	1	+	0.8	c67;t33	0	0	0	+
2159	" shrevei	Sierra Saguarido, Son., Mex.	1/52	1	+	0.44	t61;c28;h11	0	0	0	+
2165	" "	Sierra Canelas, Chih., Mex.	1/52	1	-			0	0	0	+
2167	" "	" Charuce, Chih., Mex.	1/52	1	-			0	0	0	+
2383	" "	Guajaray Scarp, Son., Mex.	2/52	1	-			0	0	0	+
2397	" "	Mex.	2/52	1	-						
2061A	" Sisalana	C. G. F.	12/51	1	+	0		0	0	0	++
2061B	" "	" "	12/51	1	+	0		0	0	0	0
2305A*	" "	Habana, Cuba	10/51	1 (pulp)	+	0.24	t50;h50	0	0	0	0
2305B*	" "	" "	10/51	1 (juice)	+	0					
2869-0*	" "	Port au Prince, Haiti	6/52	1	+	0.9	h99				
2757	" sobria	Sierra de las Palmas, B. C., Mex.	6/52	1	+	1.3	m, dm100	0	0	0	0
2759	" "	Comondu, B. C., Mex.	6/52	1	+	1.6	t45;h55	0	0	0	+
2760	" "	" "	6/52	fr	+	0.6	t100	0	0	0	0
2716	" "	La Paz, B.C., Mex.	5/52	1	+	0.45	t65;h, dn25;g10	0	0	0	0
2334	" striata	Canyon Huasteca, N.L. Mex.	2/52	1	+	0		0	0	0	0
2209	" tequilana	Los Aguajitos, Sin., Mex.	1/52	1	+	0.17	d100	0	0	0	+
2259	" "	Concordia, Sin., Mex.	2/52	1	-			0	0	0	+
2046	" toumeyana	Superior, Ariz.	12/51	1	+	0.44	h92;m, dm8	0	0	0	+
2418	" "	Fish Creek Canyon, Ariz.	3/52	1	+	1.37	h50;m, g, 50	0	0	0	0
2509	" "	" "	3/52	1	+	1.5	h100				
2758	" vexans	Comondu, B.C., Mex.	6/52	1	+	0.25	h100	0	0	0	0
2337	" victorice-reginae	Saltillo, Coa., Mex.	2/52	1	+	0		0	0	0	0
2163	" wocomahi	Sierra Guicorichi, Chich., Mex.	1/52	1	+	0		0	0	0	+
2103	" yaquiana	35 mi. N. of Guaymas, Son., Mex.	1/52	1	+	0.02	t, h, c	0	0	0	+

TABLE I. CONT. - PAGE 7

Accession No.	Collection Species	Source	Date collected	Plant part	Hemolysis test	Sapogenins			Flavonols	Alkaloids	Tannins	Sterols
						Total m.f.b., %	Identified, % of Total					
AMARYLLIDACEAE												
2392	Agave sp.	Nacori, Son., Mex.	2/52	1	+	0						
2393	" "	Sierrita Lopez, Son., Mex.	2/52	1	+	0.3	sm100					
2394	" "	" "	2/52	1	-							
2396	" "	D. F., Mex.	2/52	1	-							
2507	" "	Regina, D. F., Mex.	3/52	1	+	0						
2517	" "	Sierra Sagaribo, Son., Mex.	4/52	1	+	0.4	t100					
2518	" "	" Jojoba, Son., Mex.	4/52	1	+	0.2	h100					
2756	" "	" de las Palmas, B. C., Mex.	6/52	1	+	0.3	t100;m					
2765	" "	6 mi. W. Canipole, B. C., Mex.	6/52	1	-							
2775	" "	Punta Prieta, B. C., Mex.	6/52	1	-							
2776	" "	15 mi. E. Punta Prieta, B. C., Mex.	6/52	fr	+	1.2	h60;dh15;g25					
2778	" "	6 mi. W. Camalli, B. C., Mex.	6/52	1	+	1.7	h,dh80;m,dm20					
2785	" "	15 mi. E. Punta Prieta, B. C., Mex.	6/52	1	+	0.7	h70;m,dm30					
2882	" "	4 mi. E. Las Vegas, Ver., Mex.	7/52	1	+	0						
2931	" "	Puente Nacional, Ver., Mex.	7/52	1	+	0.55	t40;h60					
2622	Manfreda sp.	Oaxaca, D. F., Mex.	4/52	1	+	3.2	g100					
ANACARDIACEAE												
2529	Anacardium excelsum	C. G. F.	4/52	1,fl	-			+	0	+	+	+
2651	" "	" "	5/52	1,fl	-			+	0	+	+	+
2701	Loxopterygium huasango	" "	5/52	1	-			0	0	+++	+	+
2411	Mangifera indica	" "	3/52	fl	+	0		+	0	++	+	+
2112	Metopium toxiferum	" "	1/52	1,fr	+			+	0	0	++	++
2127	Pleiogynium solandri	" "	1/52	1,fr	+	0		0	0	++	++	++
2702	Poupartia axillaris	" "	2/52	1	-			+	0	0	+	+
2840	Schinus molle	" "	6/52	1,fl	-			+	0	+++	0	0
2841	" polygamus	" "	6/52	1	-			0	0	+++	0	0
2829	Spondias purpurea	" "	6/52	1,fr	-			0	0	0	0	0
ANNONACEAE												
2839	Annona paludosa	" "	6/52	1,fr	-			+	0	0	+	+
2134	Cananga odorata	" "	1/52	1,fl,fr	+	0		+	0	0	+	+

TABLE I. CONT. - PAGE 9

Collection			Sapogenins								
Accession No.	Species	Source	Date collected	Plant part	Hemolysis test	Total m.f.b., %	Identified, % of Total	Flavonols	Alkaloids	Tannins	Sterols
APOCYNACEAE											
2230	<i>Strophanthus preussii</i>	G. D. M.	1/52	f, s	+	0	0	0	0	0	+
2441D	"	"	3/52	l, r, s	+	0	0	0	0	0	+
2676D	"	"	5/52	r, s, l	-	0	0	0	0	0	0
2184A	sarmentosus	"	1/52	l	+	0	0	0	0	0	0
2184B	"	"	1/52	s	+	0	0	0	0	0	0
2231	"	"	1/52	r, s	+	0	0	0	0	0	+
2234	"	"	1/52	r	+	0	0	0	0	0	+
2237	"	"	1/52	r	+	0	0	0	0	0	0
2287D	"	"	2/52	l, r, s	+	0	0	0	0	0	+
2435D	"	"	3/52	l, r, s	-	0	0	0	0	0	0
2567	"	C. G. F.	4/52	fl, fr	+	0	0	0	0	0	0
2662D	"	"	5/52	r, s, l	+	0	0	0	0	0	0
2010	speciosus	G. D. M.	11/51	w	+	0	0	0	0	0	0
2298	tholionii	"	2/52	l, r, s	+	0	0	0	0	0	+
2451	welwitschii	"	3/52	l, r, s	+	0	0	0	0	0	+
2216	<i>Vallaris solanacea</i>	C. G. F.	1/52	l, fr	-	0	0	0	0	0	+
2566	"	"	4/52	fl	-	0	0	0	0	0	0
2181	<i>Vinca minor</i>	G. D. M.	1/52	l	-	0	0	0	++	0	0
AQUIFOLIACEAE											
2080A	<i>Ilex cornuta</i> Burfordi	"	12/51	fr	+	0	0	0	0	0	0
2080B	"	"	12/51	l	+	0	0	0	0	0	+
2081A	"	"	12/51	fr	+	0	0	0	0	0	0
2081B	"	"	12/51	l	+	0	0	0	0	0	+
2342	"	C. G. F.	2/52	l, fr	-	0	0	0	0	+++	++
2079	" fargesii	"	12/51	l	-	0	0	0	0	0	+
2085A	" pedunculosa	G. D. M.	12/51	l, fr	-	0	0	0	0	++	+
2085B	"	"	12/51	fr	-	0	0	0	0	0	+
2084	" pernyi	"	12/51	l	-	0	0	0	0	0	0
2086	" rotunda	"	12/51	l	-	0	0	0	0	0	+
ARACEAE											
2282	<i>Colocasia</i> sp.	"	2/52	l, r, t	+	0	0	0	0	0	0
2660	<i>Zantedeschia aethiopica</i>	"	5/52	l, r, s	-	0	0	0	0	0	0
ARALIACEAE											
2045	<i>Schefflera actinophylla</i>	C. G. F.	11/51	fr	+	0	0	0	0	0	0

TABLE I. CONT. - PAGE 11

Accession No.	Species	Source	Date		Plant part	Hemolysis test	Sapogenins		Flavonols	Alkaloids	Tannins	Sterols
			collected	test			Total m.f.d., %	Identified, % of Total				
2955	<i>Cordia tremula</i>	C. G. F.	8/52	1	-	-		0	0	0	0	0
2934	<i>Ehretia anacua</i>	" "	8/52	1, fl, fr	-	-		0	0	0	0	+
2108	" <i>laevis</i>	" "	1/52	1, fl	-	-		0	0	0	0	++
BORAGINACEAE												
2562	<i>Bromelia pinguin</i>	" "	4/52	1, fl	-	-		0	0	0	0	0
2318	<i>Pitcairnia corallina</i>	" "	2/52	1, fl	-	-		0	0	0	0	0
2120	<i>Tillandsia usneoides</i>	East N. Car.	1/52	w	-	-		0	0	0	0	+
BURSERACEAE												
2126	<i>Bursera graveolens</i>	C. G. F.	1/52	1	+	+		0	0	0	0	++
CACTACEAE												
2347	<i>Opuntia dilletii</i>	" "	2/52	1, fr	+	+		0	0	0	0	0
2352	" <i>tuna</i>	" "	2/52	1, fr	-	-		0	0	0	0	+
CANELLACEAE												
2113	<i>Canella winterana</i>	" "	1/52	1, fr	+	+		0	0	0	0	0
CAPPARIDACEAE												
2494	<i>Ritchiea reflexa</i>	" "	3/52	1, fl	-	-		0	0	0	0	+
CASUARINACEAE												
2475	<i>Casuarina angulata</i>	" "	3/52	1, fl, fr	-	-		+	0	0	0	0
2991	" <i>dielsiana</i>	" "	8/52	1	-	-		0	0	0	0	+
2498	" <i>equisetifolia</i>	" "	3/52	1, fl	-	-		+	0	0	0	+
2986	" <i>glauca</i>	" "	8/52	1	-	-		0	0	0	0	0
2846	" <i>suberosa</i>	" "	6/52	1	-	-		+	0	0	0	+
2476	" <i>torulosa</i>	" "	3/52	1, fr	-	-		+	0	0	+	0
CELASTRACEAE												
2036	<i>Elaeodendron quadrangulatum</i>	" "	11/51	1	-	-		0	0	0	0	+
2190	" <i>xylocarpum</i>	" "	1/52	1, fr	-	-		0	0	0	0	+
2175	<i>Maytenus boaria</i>	Chico, Cal.	1/52	1, s	-	-		0	0	0	0	+++
CEPHALOTAXACEAE												
2094A	<i>Cephalotaxus</i> sp.	G. D. M.	12/51	fl	+	+		0	0	+	0	0
2094B	" "	" "	12/51	1	+	+		0	+	+++	0	+

TABLE I. CONT. - PAGE 12

		CHENOPODIACEAE					
		11/51	1,fr	+	0	0	0
2034	<i>Pandorea ricasoliana</i>	C. G. F.				0	+++
CISTACEAE							
2589	<i>Cistus monspeliensis</i>	Chico, Cal.	4/52	1,s	-	+	+
COCHLOSPERMACEAE							
2214	<i>Cochlospermum vitifolium</i>	C. G. F.	1/52	1,fl	-	0	+
2803	"	"	4/52	fr	+	0	+
COMBRETACEAE							
2361	<i>Anogeissus pendula</i>	"	2/52	1,fr	-	0	++
2534	<i>Bucida buceras</i>	"	4/52	1,fl	-	0	++
2497	<i>Combretum farinosum</i>	"	3/52	1,fl	+	0	++
2746	"	"	6/52	fr	+	0	+
2042	" <i>grandiflorum</i>	"	11/51	1,fl	-	0	++
2505	"	"	3/52	fr	-	0	+
2519	" <i>paniculatum</i>	"	4/52	1,fl	-	0	++
2128	<i>Conocarpus erecta</i>	"	1/52	1,fr	-	0	++
2825	<i>Quisqualis indica</i>	"	6/52	1,fl	-	0	++
2072	<i>Terminalia bellerica</i>	"	12/51	1,fr	-	0	++
2849	" <i>catappa</i>	"	6/52	1,fl	-	+	+
2862	" <i>edulis</i>	"	7/52	1	-	0	+++
2860	" <i>hayesii</i>	"	7/52	1	-	0	+++
2708	" <i>muelleri</i>	"	5/52	fl	-	0	+++
2861	" <i>myriocarpa</i>	"	7/52	1	-	0	+++
2424	" <i>pellucida</i>	"	3/52	1,fl	-	0	+++
COMPOSITAE							
2044	<i>Tithonia diversifolia</i>	"	11/51	1,fl	+	0	0
CONVOLVULACEAE							
2076	<i>Ipomoea arborescens</i>	"	12/51	1,fl	+	0	++
2251	" <i>batatas</i>	G. D. M.	1/52	r,t	-	0	0
2043	<i>Porana paniculata</i>	C. G. F.	11/51	1,fl	-	0	++
CORNACEAE							
2026	<i>Alangium chinense</i>	"	11/51	1,fr	-	0	+++
CRASSULACEAE							
2160	<i>Echeveria</i> sp.	Sierra Saguaribo,	1/52	1	-	0	+
2265	<i>Kalanchoe velutina</i>	Son., Mex. C. G. F.	2/52	1,fl,r	-	0	+

TABLE I. CONT. - PAGE 13

Accession No.	Species	Source	Collection		Hemolysis test	Sapogenins		Flavor-nols	Alkaloids	Tannins	Sterols
			Date collected	Plant part		Total, m.f.d., %	Identified, % of Total				
2549	<i>Dioscorea bulbifera</i>	New Delhi, India	3/52	t	-	3.3	d100	+	0	0	0
2874	"	El Palmar, Ver., Mex.	7/52	t	+						
2879	"	2 mi. W El Fortin, Ver., Mex.	7/52	rh	+	3.5	d98:y2				
2884	"	4 mi. N San Andres Tuxtla, Ver., Mex.	7/52	rh	+	6.9	d100				
2926	"	G. D. M.	8/52	l,s,r	+	0					
2998	"	Tlapacoyan, Ver., Mex.	8/52	rh	+	4.6	d100				
3000	"	2 mi. N Mizantla, Ver., Mex.	8/52	rh	+	2.6	d100				
2550	"	New Delhi, India	3/52	t	+	0					0
2337-0	"	Sumatra (Merck)	1/52	t	+	0					0
2249	"	G. D. M.	1/52	l,r,s	+	0					0
2873	"	El Palmar, Ver., Mex.	7/52	t	+	0					
2880	"	4 mi. N San Andres Tuxtla, Ver., Mex.	7/52	rh	+	0.6	d50:y50				
2883	"	S of Huatusco, Ver., Mex.	7/52	rh	+	0.5	d50+:y50-				
2929	"	Cosantlan, Ver., Mex.	7/52	rh	+	1.3	d100				
2855	"	Centre Co., Pa.	6/52	r,l,s	+	1.1					
2856	"	"	6/52	r	+	0.5mi	d100				
2250	"	G. D. M.	1/52	r,t	-						0
2854	"	Centre Co., Pa.	6/52	r	+	1.0	d100				++
2336-0	"	E. Africa (Merck)	1/52	t	-						
2001	"	G. D. M.	11/51	w	-						0
2002	"	"	11/51	w	-						0
2003	"	"	11/51	w	-						0
2063	"	San Jose, C. R.	9/51	t	-						0
2063-0	"	Scherling, Corp.	12/51	r	+	5.0	d100				0
2180A	"	San Jose, C. R.	1/52	t	+	3.7	d100				0
2180B	"	"	1/52	t	+	0					0
2180C	"	"	1/52	t	+	0					0
2180D	"	"	1/52	t	-						0
2238	"	G. D. M.	1/52	l,t,r,s	-						0
2239	"	"	1/52	r	-						0
2240	"	"	1/52	r	-						0
2241	"	"	1/52	l,s,r	-						0
2242	"	"	1/52	l,s,r	-						0
2243	"	"	1/52	l,s,r	-						0
2244	"	"	1/52	r,s	-						+

TABLE I. CONT. - PAGE 15

Collection			Sapogenins								
Accession No.	Species	Source	Date collected	Plant part	Hemolysis test	Total, m.f.b., %	Identified, % of total	Flavonoids	Alkaloids	Tannins	Sterols
DIOSCOREACEAE											
2921	Dioscorea sp.	G. D. M.	8/52	l,s,r	+	0	0	0	0	0	0
2922	"	"	8/52	l,s,r	+	0	0	0	0	0	0
2923	"	"	8/52	l,s,r	+	0	0	0	0	0	0
2924	"	"	8/52	l,s,r	+	0	0	0	0	0	0
2928	"	3 mi. E Plan del Rio, Ver., Mex.	7/52	rh	+	0	0	0	0	0	0
2930	"	4 Mi. E Tolome, Ver., Mex.	7/52	rh	+	0	0	0	0	0	0
2932	"	3 mi. E Plan del Rio, Ver., Mex.	7/52	rh	+	3.3	d:some y	0	0	0	0
2997	"	Jalapa, Ver., Mex.	8/52	rh	+	2.4		0	0	0	0
2999	"	Ver., Mex.	8/52	rh	+	0		0	0	0	0
2335-0	"	E. Africa (Merck)	1/52	t	+	0		0	0	0	0
2338-0	"	W. Africa (Merck)	1/52	t	-	0		0	0	0	0
2339-0	"	"	1/52	t	-	0		0	0	0	0
2340	"	"	1/52	t	+	0		0	0	0	0
EBENACEAE											
2804	Diospyros discolor	C. G. F.	4/52	fl	-	0		0	0	+++	0
2135	" rosei	"	1/52	l,fr	-	0		0	0	0	+++
2946	" senegalensis	"	8/52	l,fr	-	0		0	0	0	+++
2727	" virginiana	"	5/52	l,fr	-	0		0	0	0	+++
2956	Maba inconstans	"	8/52	l,fl	-	0		0	0	0	+
ELAEAGNACEAE											
2217	Elaeagnus philippensis	"	1/52	l,fr	-	0		0	0	0	+++
ELAEOCARPACEAE											
2581	Muntingia calabura	"	4/52	l,fl,fr	+	0		0	0	++	++
ERICACEAE											
2087A	Pieris japonica	G. D. M.	12/51	l	-	0		0	0	++	+
2087B	"	"	12/51	fl	-	0		0	0	++	0
2925	Rhododendron sp. (Azalea)	"	8/52	l	+	0		0	0	++	0
ERYTHROXYLACEAE											
2720	Erythroxylon coca	C. G. F.	5/52	l,fl,fr	-	0		0	0	0	0
EUPHORBIACEAE											
2400	Aleurites fordii	"	3/52	l,fl	-	0		0	0	0	+
2565	" moluccana	"	4/52	fl	-	0		0	0	0	+
2522	" trisperma	"	4/52	l,fl	-	0		0	0	+++	+

TABLE I. CONT. - PAGE 17

Collection

Sapogenins

Accession No.	Species	Source	Date collected	Plant part	Hemolysis test	Total m.f.b., %	Identified, % of Total	Flavonols	Alkaloids	Tannins	Sterols	
GUTTIFERAE												
2528	<i>Garcinia livingstonei</i>	C. G. F.	4/52	l, fl	-			+	0	0	+	
2401	" <i>mooreana</i>	" "	3/52	l, fl	+	0		0	0	+++	+	
2823	" <i>spicata</i>	" "	6/52	fl	-			++	0	0	0	
2219	" <i>tinctoria</i>	" "	1/52	l, fl	+	0		+	0	0	0	
HERNANDIACEAE												
2935	<i>Hernandia peltata</i>	" "	8/52	l	-			0	0	0	0	
LAURACEAE												
2368	<i>Persea americana</i>	" "	2/52	fl	-			+	0	0	+	
LECYTHIDACEAE												
2021	<i>Lecythis elliptica</i>	" "	11/51	l, fr	-			0	0	+++	++	
LEGUMINOSAE												
2116	<i>Arbus precatorius</i>	" "	1/52	l, fr	-			0	0	0	++	
2317	<i>Acacia adansonii</i>	" "	2/52	l	+	0		+	0	+++	0	
2077	" <i>auriculaeformis</i>	" "	12/51	l, fl, fr	+	0		0	0	+++	+	
2722	" <i>bonariensis</i>	" "	5/52	l, fl	+	0		0	0	0	+	
2150	" <i>catechu</i>	" "	1/52	fr	+	0		0	0	0	+	
2428	" <i>confusa</i>	" "	3/52	l, fl	-			0	+	++	+	
2723	" "	" "	3/52	l, fr	-			+	0	++	0	
2964	" <i>cunninghamii</i>	" "	8/52	l	-			0	0	0	0	
2724	" <i>horrida</i>	" "	5/52	l, fl	-			0	0	0	0	
2199	" <i>lutea</i>	" "	1/52	l, fl, fr	+	0		+	0	0	0	
2427	" <i>modesta</i>	" "	3/52	l, fl	+	0		0	0	0	+	
2544	" "	" "	4/52	fl	+	0		+	0	0	0	
2425	" <i>nilotica</i>	" "	3/52	l, fr	-	0		0	0	+++	++	
2426	" <i>seyal</i>	" "	3/52	l, fl	-	0		0	0	+++	++	
2556	" <i>villosa</i>	" "	4/52	l, fl	+	0		0	0	0	+	
2847	<i>Acrocarpus fraxinifolius</i>	" "	6/52	l	-			+	0	+	+	
2954	<i>Adenanthera microsperma</i>	" "	8/52	l	-			0	0	0	0	
2951	<i>Albizia berteriana</i>	" "	8/52	l	-			0	0	0	0	
2486	" <i>julibrissin</i>	Chico, Cal.	3/52	b	+	0		0	0	0	0	
2482	" <i>kalkora</i>	" "	3/52	b	+	0		0	0	0	0	
2484	" "	" "	3/52	b	+	0		0	0	0	0	
2959	" <i>katangensis</i>	C. G. F.	8/52	l	-	0		0	0	0	0	
2314	" <i>lebbeck</i>	" "	2/52	l, fr	+	0		0	0	0	+++	
2417	" <i>lebbeckoides</i>	" "	3/52	fr	+	0		0	0	0	++	
2906	" <i>lcpphantha</i>	G. D. M.	8/52	l, s, r	+	0		0	0	0	0	

TABLE I. CONT. - PAGE 19

Collection		Sapogenins										
Accession No.	Species	Source	Date collected	Plant part	Hemolysis Test	Total m.f.b., %	Identified, % of Total	Flavonols	Alkaloids	Tannins	Sterols	
LEGUMINOSAE												
2720-0A	<i>Glycyrrhiza glabra</i>	Turkey (MacAndrews & Forbes)	5/52	b	+	0		+	0	0	0	
2720-0B	" <i>glandulifera</i> "	"	5/52	b,r	+	0		0	0	0	0	
2720-0C	" <i>glandulifera</i> "	"	5/52	r	+	0		0	0	0	0	
2969-0	" <i>glandulifera</i> "	"	8/52	b		0						
2721-0A	" <i>glandulifera</i> "	Iraq (MacAndrews & Forbes)	5/52	b	+	0		0	0	0	0	
2721-0B	" <i>violacea</i> "	"	5/52	b,r	+	0		0	0	0	0	
2721-0C	" <i>violacea</i> "	"	5/52	r	+	0		0	0	0	0	
2434	<i>Haematoxylum campechianum</i>	C. G. F.	3/52	fr	+	0		0	0	+++	+	
2850	<i>Hebostigma cubense</i>	"	6/52	l	-	0		0	0	0	+	
2198	<i>Leucaena glauca</i>	"	1/52	l,fr	-	0		0	0	0	++	
2890	<i>Lbidiibia punctata</i>	"	7/52	l	-	0		0	0	0	0	
2945	<i>Lonchocarpus lucidus</i>	"	8/52	l,fl	-	0		+	0	0	0	
2994	" <i>violaceus</i> "	"	8/52	l,fl	-	0		0	0	0	0	
2634	<i>Lysidice rhodostegia</i>	"	5/52	l,fl	-	0		+	0	++	+	
2125	<i>Lysiloma divaricata</i>	"	1/52	l,fr	+	0		+	0	++	++	
2940	" <i>latisiliqua</i> "	"	8/52	l	-	0		+	0	0	++	
2661	<i>Millettia ferruginea</i>	G. D. M.	5/52	l,r,s	-	0		0	0	0	0	
2109	" <i>ovalifolia</i> "	C. G. F.	1/52	l,fr	-	0		+	0	0	++	
2569	"	"	4/52	fl	+	0		0	0	0	0	
2115	<i>Myroxylon pereirae</i>	"	1/52	l,fr	+	0		0	0	0	+	
2952	<i>Parkia biglobosa</i>	"	8/52	l	-	0		0	0	0	++	
2948	<i>Peltophorum dubium</i>	"	8/52	l,fl	-	0		+	0	++	+	
2223	" <i>vogelianum</i> "	"	1/52	l,fr	-	0		+	0	+++	+	
2625	<i>Phyllocarpus septentrionalis</i>	"	5/52	l,fl,fr	-	0		0	0	0	+++	
2408	<i>Pithecellobium confine</i>	"	3/52	l,fl,fr	-	0		0	0	0	+	
2867	" <i>dulce</i> "	"	7/52	l	-	0		0	0	0	0	
2993	"	"	8/52	l	-	0		0	0	0	+	
2537	"	"	4/52	l,fl	+	0		0	0	0	++	
2902	<i>Junghuhnianum</i>	"	7/52	fr	-	0		0	0	0	0	
2990	<i>Pithecellobium</i>	"	8/52	l	-	0		0	0	0	0	
2799	" <i>impruinatum</i> "	"	4/52	l,fl	+	0		0	0	0	+	
	" <i>scalare</i> "	"				0						

TABLE I. CONT. - PAGE 21

Collection		Sapogenins										
Accession No.	Species	Source	Date collected	Plant part	Hemolysis test	Total m.f.b., %	Identified % of Total	Flavonols	Alkaloids	Tannins	Sterols	
LILIACEAE												
2609	<i>Yucca peninsularis</i>	San Miguel, B.C., Mex.	4/52	l	+	1.8	t100					
2611	"	"	4/52	l	+	1.03	953					
2616	"	"	4/52	l	+	0.9	t50;g50					
2618	"	"	4/52	fr	+	0.41	t100					
2601	<i>schidigera</i>	Fernando, B.C., Mex.	4/52	l	+	0.34	ss100					
2608	"	"	2/52	l	+	1.3	ss55;mk45					
2777	"	Agustin, Mex.	6/52	fr	+	3/3	ss80;mk20	0	0	0	++	
2161	" sp.	Jecapaco, Chih, Mex.	1/52	l	+	0.3	ss100					
2387	"	Tierra Negra, Son., Mex.	2/52	l	+	1.4	ss100					
2512	"	El Datil, Son., Mex.	4/52	l	+	1.1	ss100					
2620	<i>Zigadenus</i> sp.	Rosario, B. C., Mex.	4/52	w	+	0		0	0	0	0	
LOGANIACEAE												
2568	<i>Strychnos spinosa</i>	C. G. F.	4/52	fl	+	0		0	0	0	+	
LYTHRACEAE												
2900	<i>Lagerstroemia speciosa</i>	"	7/52	fl	-			0	0	+++	0	
2358	<i>Woodfordia fruticosa</i>	"	2/52	l, fl	+	0		0	0	+++	++	
MALPIGHIACEAE												
2800	<i>Byrsonima spicata</i>	"	4/52	l	-			0	0	+++	+	
2365	<i>Hiptage benghalensis</i>	"	2/52	l, fl	-			0	0	0	++	
2584	<i>Malpighia puniceifolia</i>	"	4/52	fl	-			0	0	0	++	
2366	<i>Stigmaphyllon fulgens</i>	"	2/52	l, fl	-			0	0	0	++	
2927A	<i>humboldtianum</i>	El Palmar, Ver., Mex.	6/50	l, s	+	0		0	0	0	++	
2927B	"	"	6/50	r, t	+	0		0	0	0	+	
2927	"	G. D. M.	8/52	w	+	0		0	0	0	+	
2572	<i>ledifolium</i>	C. G. F.	4/52	l, fl	+	0		+	0	0	+	
2560	<i>lingulatum</i>	"	4/52	l, fl	-			0	0	0	0	
2583	"	"	4/52	fr	+	0		0	0	0	0	
2471	<i>Thryallis glauca</i>	"	3/52	l, fl	-			+	+	++	0	
MALVACEAE												
2474	<i>Abutilon mollissimum</i>	"	3/52	l, fl, fr	-			0	0	0	0	
2133	<i>Bombacidendron vidalianum</i>	"	1/52	l, fl	+	0		0	0	0	+	
2149	<i>Hibiscus platanifolius</i>	"	1/52	fr	-			0	0	0	+	
2224	<i>Hibiscus tricuspid</i>	"	1/52	l, fl	-			0	0	0	+	
2041	<i>Kydia calycina</i>	"	11/51	l, fl	+			0	0	0	0	
2221	<i>Thespesia grandiflora</i>	"	1/52	l, fl	+	0		0	0	0	++	

TABLE I. CONT. - PAGE 22

		MELASTOMATACEAE				MELIACEAE			
2728	Tetrazygia bicolor	C. G. F.	5/52	1, fl	-	0	0	+++	0
2819	Cedrelea odorata	"	6/52	1	-	0	0	0	0
2865	Khaya nyasica	"	7/52	1	-	0	0	0	+
2027	Melia azedarach	"	11/51	1, fr	-	0	0	0	+
2496	" candollei	"	3/52	1, fl	-	0	0	0	+
2641	Swietenia candollei	"	5/52	1	-	+	0	+++	+
2642	" humilis	"	5/52	1	-	+	0	+++	+
2640	" macrophylla	"	5/52	1	-	+	0	0	++
2699	Trichillia chirindensis	"	5/52	1	-	+	0	0	0
2697	" hirta	"	5/52	1	-	+	0	0	0
2953	" spondiodes	"	8/52	1	-	0	0	0	0
MENISPERMACEAE									
2585	Cocculus trilobus	Chico, Cal.	4/52	1, s	-	0	0	0	0
MORACEAE									
2137	Ficus aurea	C. G. F.	1/52	1, fr	-	0	0	0	0
2515	" cotinifolia	San Bernardo, Son., Mex.	4/52	1	-	0	0	0	++
2836	" cumingii	C. G. F.	6/52	1, fr	-	0	0	0	0
2513	" padifolia	San Bernardo, Son., Mex.	4/52	1	-	0	0	0	+
2514	" radulina	"	4/52	1	-	0	0	0	+
MORINGACEAE									
2963	Moringa oleifera	C. G. F.	8/52	1	-	0	0	0	+
MUSACEAE									
2407	Strelitzia alba	"	3/52	1, fr	-	0	0	0	+
MYRSINACEAE									
2050	Ardisia humilis	"	12/51	1, fr	-	0	0	0	+
MYRTACEAE									
2429	Callistemon lanceolatus	"	3/52	1, fl	+	0	0	+++	+
2430	" rigidus	"	3/52	1, fr	-	0	0	+++	+
2229	Eugenia coronata	"	1/52	fr	-	0	0	0	0
2406	" dalbergioides	"	3/52	1, fr	+	0	0	+++	++
2580	" dombeyi	"	4/52	1, fr	+	0	0	+++	++
2629	" eucalyptoides	"	5/52	1, fl	+	0	0	0	+
2313	" jambos	"	2/52	1, fl	+	0	0	+++	+
2802	" lushnathiana	"	4/52	1, fl	-	0	0	+++	0
2364	" supra-axillaris	"	2/52	1, fr	+	0	0	+++	++
2579	" uniflora	"	4/52	1, fl, fr	+	0	0	+++	0
2268	Melaleuca genistifolia	"	2/52	1, fr	-	0	0	+++	++
2416	"	"	3/52	fl	-	0	0	+++	+
2636	Psidium guajava	"	5/52	fl	-	0	0	+++	+

TABLE I. CONT. - PAGE 23

Collection		Sapogenins										
Accession No.	Species	Source	Date collected	Plant part	Hemolysis test	Total, m.f.b., %	Identified, % of Total	Flavonols	Alkaloids	Tannins	Sterols	
MYRTACEAE												
2635	<i>Psidium guineense</i>	C. G. F.	5/52	fl	-			+	0	+++	+	
2414	<i>Syzygium cumini</i>	"	3/52	fl	+	0		+	0	0	0	
2193	" <i>lineatum</i>	"	1/52	l, fl	-			0	0	+++	+	
2504	"	"	3/52	fr	-			0	0	+++	0	
2703	" <i>syzygioides</i>	"	5/52	l	-			0	0	+	+	
2798	<i>Tristania conferta</i>	"	4/52	l, fl	+	0.3	nss	+	0	+	0	
NYCTAGINACEAE												
2040	<i>Bougainvillea glabra</i>	"	11/51	l, fl	-			0	0	0	+	
2541	" <i>spectabilis</i>	"	4/52	l, fl	-	0		0	0	0	+	
2542	" <i>warszewiczii</i>	"	4/52	l, fl	+	0		0	0	0	0	
OCHNACEAE												
2503	<i>Ochna mossambicensis</i>	"	3/52	l, fl, fr	-			0	0	0	+	
OLEACEAE												
2225	<i>Forestiera rhamnifolia</i>	"	1/52	fr	-			+	0	0	++	
2490	<i>Fraxinus</i> sp.	Chico, Cal.	3/52	b	-			0	0	0	+	
2995	<i>Olea verrucosa</i>	C. G. F.	8/52	l	-			0	0	0	++	
2082	<i>Osmanthus ilicifolius</i>	G. D. M.	12/51	l	-			+	0	++	0	
2590	<i>Syringa oblata</i> var. <i>affinis</i>	Chico, Cal.	4/52	l, s	-			+	0	0	0	
2592	"	"	4/52	fl	+	0		+	0	0	0	
ONAGRACEAE												
2083	<i>Fuchsia boliviana</i> v. <i>luxuriana</i>	G. D. M.	12/51	l	-			0	0	++	+	
OXALIDACEAE												
2049	<i>Averrhoa bilimbi</i>	C. G. F.	12/51	l, fr	+	0		0	0	0	++	
2068	" <i>carambola</i>	"	12/51	l, fr	-			+	0	+	+	
PALMAE												
2132	<i>Adonidia merrillii</i>	"	1/52	l, fr	-			0	0	0	++	
2138	<i>Arecastrum romanzoffianum</i>	"	1/52	l, fl, fr	-			0	0	0	++	
2200	<i>Arikuryroba schizophylla</i>	"	1/52	l, fl, fr	-			0	0	0	+	
2069	<i>Attalea cohune</i>	"	12/51	l, fl	-			0	0	0	+++	
2468	<i>Bismarckia nobilis</i>	"	3/52	l, fr	+	0		+	0	0	0	
2557	<i>Brahea dulcis</i>	"	4/52	l, fl	+	0		0	0	0	+	
2052	<i>Butia bonnetii</i>	"	12/51	l, fr	-			0	0	0	+	
2626	" <i>capitata</i> var. <i>odorata</i>	"	5/52	l, fl, fr	-			0	0	0	0	

TABLE I. CONT. - PAGE 25

Collection		Sapogenins		Date		Hemol-		Total		Flavo-		Alka-		Tan-		Ster-	
Accession No.	Species	Source		collected	Plant part	ysis test		m.f.b.,	\$ of Total	nols	loids	nins	ols				
2817	<i>Pandanus baptistii</i>	C. G. F.		6/52	l, f	-		0	0	0	0	0	0	0	0	0	0
2818	<i>Pandanus tectorius</i>	C. G. F.		6/52	l, f	-		0	0	0	0	0	0	0	0	0	0
PANDANACEAE																	
PASSIFLORACEAE																	
2833	<i>Passiflora suberosa</i>	" " "		6/52	l, fl	-		+	0	0	0	0	0	0	0	0	0
PIMNACEAE																	
2095	<i>Abies holophylla</i>	G. D. M.		12/51	l	-		0	0	0	0	++	+	0	0	0	0
2403	<i>Callitris quadrivalvis</i>	C. G. F.		3/52	l, fl	-		0	0	0	0	++	+	0	0	0	0
2097	<i>Cedrus atlantica</i>	G. D. M.		12/51	l	+		0	0	0	0	0	0	0	0	0	0
2091	<i>Chamaecyparis pisifera</i> var. <i>plumosa</i>	" " "		12/51	l, fr	-		0	0	0	0	++	+	0	0	0	0
2078	<i>Cupressus benthami</i>	C. G. F.		12/51	l, fr	-		0	0	0	0	+	+	0	0	0	0
2169	" <i>funbris</i>	Chico, Cal.		1/52	l, s	-		+	0	0	0	+	+	0	0	0	0
2842	"	C. G. F.		6/52	l, s	-		+	0	0	0	0	0	0	0	0	0
2170	" <i>sempervirens</i>	Chico, Cal.		1/52	l, s	-		+	0	0	0	++	+	0	0	0	0
2173	"	" " "		1/52	l, s	-		+	0	0	0	++	+	0	0	0	0
2053	var. <i>pyramidalis</i> <i>Juniperus barbadensis</i>	C. G. F.		12/51	l, fr	+		0	0	0	0	+	+	0	0	0	0
2433	"	" " "		3/52	fr	-		0	0	0	0	+	+	0	0	0	0
2843	" <i>procera</i>	" " "		6/52	l	-		+	0	0	0	0	0	0	0	0	0
2096	"	" " "		12/51	l	-		0	0	0	0	0	0	0	0	0	0
2088	<i>Picea omorika</i>	G. D. M.		12/51	l	-		0	0	0	0	0	0	0	0	0	0
2089	<i>Abies pungens</i>	" " "		12/51	l	-		0	0	0	0	++	+	0	0	0	0
2093	<i>Pinus armandi</i>	" " "		12/51	l	+		0	0	0	0	+	+	0	0	0	0
2090	" <i>bungeana</i>	" " "		12/51	l	+		0	0	0	0	+	+	0	0	0	0
2177	"	Chico, Cal.		1/52	l, s	+		0	0	0	0	0	0	0	0	0	0
2171	" <i>sabiniiana</i>	" " "		1/52	l, s	+		0	0	0	0	+++	+	0	0	0	0
2183	<i>Pseudotsuga taxifolia</i>	G. D. M.		1/52	l	-		0	0	0	0	++	+	0	0	0	0
2174	<i>Thuja orientalis</i>	Chico, Cal.		1/52	l, s	+		0	0	0	0	+	+	0	0	0	0
2092	" sp.	G. D. M.		12/51	l	-		0	0	0	0	0	0	0	0	0	0
2182	<i>Tsuga caroliniana</i>	" " "		1/52	l	+		+	0	0	0	0	0	0	0	0	0
PIPERACEAE																	
2140	<i>Piper tuberculatum</i>	C. G. F.		1/52	l, fl, fr	-		0	0	0	0	0	0	0	0	0	0
PLATANACEAE																	
2489	<i>Platanus</i> sp.	Chico, Cal.		3/52	b	-		+	0	0	0	+	+	0	0	0	0

TABLE I. CONT. - PAGE 26

		POLYGALLACEAE							
		4/52	fl	+	0	0	0	0	0
2571	Securidaca diversifolia	C. G. F.							
P O L Y G O N A C E A E									
2033	Antigonon leptopus	" "	11/51	1, fr	-	0	0	+	+++
2075	Coccoloba diversifolia	" "	12/51	1, fl	-	+	0	++	++
2035	Coccoloba grandifolia	" "	11/51	1	-	0	0	+	++
2228	" Krugii	" "	1/52	fr	-	0	0	+	++
2938	"	" "	8/52	1	-	0	0	+	+++
2866	" uvifera	" "	7/52	1	-	0	0	0	+
2619	Rumex hymenosepalus	Rosario, B.C., Mex.	4/52	1	-	+	0	+++	0
2051	Ruprechtia coriacea	C. G. F.	12/51	1, fl	-	0	0	++	++
2353	"	" "	2/52	fr	-	0	0	++	++
2215	Triplaris americana	" "	1/52	1, fl	-	+	0	++	++
2637	" "	" "	5/52	fr	-	0	0	+++	0
2939	" cumingiana	" "	8/52	1	-	0	0	0	+++
2409	" surinamensis	" "	3/52	1	-	0	0	0	++
2962	"	" "	8/52	1	-	0	0	0	++
P O R T U L A C A C E A E									
2736	Talinum paniculatum	" "	6/52	1, fl	-	0	0	0	0
P R O T E A C E A E									
2831	Leucodendron capense	" "	6/52	1	-	+	0	+	0
2316	Macadamia ternifolia	" "	2/52	1	-	0	0	0	+
R H A M N A C E A E									
2405	Columbrina cubensis	" "	3/52	1, fr	+	0	0	0	++
2957	" ferruginosa	" "	8/52	1	-	0	0	0	0
2826	Gouania lupuloides	" "	6/52	1, fl, fr	+	0	0	0	+
2415	Zizyphus mauritiana	" "	3/52	fr	-	0	0	0	+
R O S A C E A E									
2359	Chrysobalanus icaco	" "	2/52	1, fl, fr	-	+	0	++	+++
2172	Eriobotrya japonica	Chico, Cal.	1/52	1 bud, s	+	0	0	+	+++
2413	"	" "	3/52	fr	+	0	0	0	++
2821	Licania arborea	" "	6/52	1	-	+	0	0	+
2412	" rigida	" "	3/52	fl	-	+	0	0	+
2178	Pyracantha coccinea var. latandii	Chico, Cal.	1/52	1, fr, s	+	+	0	+++	+
R U B I A C E A E									
2996	Adina cordifolia	C. G. F.	8/52	1	-	+	0	0	+
2694	Cephalanthus sp.	Mendoza, Argentine	5/52	bu	-	0	0	0	0
2039	Coffea arabica	C. G. F.	11/51	1, fr	-	0	0	0	++
2525	" dybowskii	" "	4/52	1, fl	-	+	0	0	++
2725	Genipa americana	" "	5/52	1, fl	-	0	0	0	0
2539	Ixora lutea	" "	4/52	1, fl	+	+	0	++	0
2357	" parviflora	" "	2/52	1, fl	-	+	0	++	++

TABLE 1. CONT. - PAGE 27

Collection			Sapogenins								
Accession No.	Species	Source	Date collected	Plant part	Hemolysis test	Total, m.f.b., % of total	Identified, % of total	Flavonols	Alkaloids	Tannins	Sterols
RUBIACEAE											
2037	<i>Paederia foetida</i>	C. G. F.	11/51	1, fr	-	0	0	0	0	0	+
2345	<i>Psychotria bacteriophila</i>	"	2/52	1, fr	-	0	0	0	0	0	++
2360	<i>Randia formosa</i>	"	2/52	1, fr	-	0	0	0	0	0	0
2272	<i>Vangueria infausta</i>	"	2/52	1, fr	-	0	0	0	0	0	++
2267	<i>Vangueria madascaresiensis</i>	"	2/52	1, fr	+	0	0	0	0	0	++
RUTACEAE											
2117	<i>Casimiroa edulis</i>	"	1/52	1, fl	-	0	0	0	0	0	+
2506	"	"	3/52	fr	-	0	0	0	0	0	0
2118	<i>tetrameria</i>	"	1/52	1, fl	-	0	0	0	0	0	0
2815	<i>Citropsis gillettiana</i>	"	6/52	1, fr	-	0	0	0	0	0	0
2058	<i>Citrus amblycarpa</i>	"	12/51	1, fr	+	0	0	0	0	0	0
RUBIACEAE											
2056	" <i>aurantium</i>	"	12/51	1, fr	-	0	0	0	0	0	0
2816	" <i>grandis</i>	"	6/52	1	-	0	0	0	0	0	0
2067	" <i>medica</i>	"	12/51	1	+	0	0	0	0	0	+
2057	" <i>reticulata</i> x	"	12/51	1, fr	+	0	0	0	0	0	++
2820	" <i>paradisii</i>	"	6/52	1	-	0	0	0	0	0	++
RUBIACEAE											
2812	" <i>sinensis</i>	"	6/52	1	-	0	0	0	0	0	0
2059	" sp.	"	12/51	1, fr	+	0	0	0	0	0	+
2811	"	" (Rhodesia)	6/52	1, fr	-	0	0	0	0	0	+
2055	"	"	12/51	1, fr	-	0	0	0	0	0	0
2226	<i>Murraya exotica</i>	"	1/52	fr	+	0	0	0	0	0	0
RUBIACEAE											
2735	" <i>koenigi</i>	"	6/52	1, fl	+	0	0	0	0	0	0
2813	<i>Pamburus missionis</i>	"	6/52	1, fl	-	0	0	0	0	0	0
2814	<i>Poncirus trifoliata</i>	"	6/52	1, fr	-	0	0	0	0	0	0
2466	<i>Swinglea glutinosa</i>	"	3/52	1, fr	-	0	0	0	0	0	0
2121	<i>Zanthoxylum clava-herculis</i>	East N. Car.	1/52	S	+	0	0	0	0	0	0
SALICACEAE											
2483	<i>Populus tomentosa</i>	Chico, Cal.	3/52	b	-	0	0	0	0	0	0
SALICACEAE											
SAPINDACEAE											
2650	<i>Alectryon subcinerum</i>	C. G. F.	5/52	1	-	0	0	0	0	0	+++
2709	<i>Dimocarpus longan</i>	"	5/52	1, fl	-	0	0	0	0	0	++
2574	<i>Paullinia turbacensis</i>	"	4/52	1, fl	-	0	0	0	0	0	+
2858	<i>Sapindus indica</i>	"	7/52	1	-	0	0	0	0	0	0
2071	" <i>senegalensis</i>	"	12/52	1, fl	+	0	0	0	0	0	+++
2477	" <i>trifoliata</i>	"	3/52	1, fr	+	0	0	0	0	0	++

TABLE I. CONT. - PAGE 29

<u>Collection</u>		<u>Sapogenins</u>								
Accession No.	Species	Date collected	Plant part	Hemolysis test	Total m.f.b., %	Identified % of Total	Flavonoids	Alkaloids	Tannins	Sterols
THEOPHRASTACEAE										
2356	Jacquinia pungens	2/52	l, fr	+	0	0	0	0	0	0
2388	"	2/52	fr	+	0	+	0	0	0	+
2748	"	6/52	fl	+	0	0	0	0	0	+
TILIACEAE										
2025	Berrya ammonilla	11/51	l, fr	-	0	0	0	0	0	++
2119	"	1/52	fl	-	0	0	0	0	0	+
2828	Grewia asiatica	6/52	l, fr	-	0	0	0	0	0	0
2470	Luehea divaricata	3/52	l, fr	-	0	0	0	0	0	+
2851	"	6/52	l	-	0	0	0	0	0	+
2791	Microcos lateriflora	4/52	l, fl	-	0	+	0	0	0	+
2838	"	6/52	fr	-	0	0	0	0	0	0
2487	Tilia dasystyla	3/52	b	+	0	+	0	0	+	0
ULMACEAE										
2624	Trema orientalis	5/52	l, fl	-	0	0	0	0	0	+
2488	Ulmus pumila	3/52	b	-	0	+	0	0	++	+
UMBELLIFERAE										
2576	Solandra guttata	4/52	l	-	0	0	0	0	0	+
URTICACEAE										
2139	Boermeria nivea	1/52	l, r	-	0	0	0	0	0	++
VELLOZACEAE										
2450	Vellozia phantasmagoria	3/52	l, r	-	0	++	0	0	0	0
VERBENACEAE										
2988	Citharexylum fruticosum	8/52	l	-	0	0	0	0	0	++
2985	" tristachyum	8/52	l	-	0	0	0	0	0	+
2054	Clerodendron fallax	12/51	l, fr	-	0	0	0	0	0	0
2868	" minahassae	7/52	l	-	0	0	0	0	0	+
2194	Congea tomentosa	1/52	l, fl	+	0	0	0	0	0	+
Other Species										
2705	Gmelina asiatica	5/52	l, fl	-	0	+	0	0	0	0
2704	" hystrix	5/52	l, fl, fr	-	0	0	0	0	0	+
2344	Helmskoldia sanguinea	2/52	l, fl	+	0	++	0	0	0	++
2729	Lantana sellowiana	5/52	l, fl	-	0	0	0	0	0	+
2526	Petrea volubilis	4/52	l, fl	-	0	+	0	0	0	+

TABLE I. CONT. - PAGE 30

2744	Amomum cardamomum	C. G. F.	6/52	1,fr	-	0	0	0	0
2958	Gualacum sanctum	" "	8/52	1	-	0	0	0	+

* BY-PRODUCT OF FIBER MANUFACTURE